

[ACTIVE ELEMENT ARRAY STRUCTURE]

Abstract

An active element array structure is provided. The active element array structure comprises a base plate and a plurality of gate lines, data lines, active devices, storage capacitors and pixel electrodes thereon. Each storage capacitor has an upper electrode and the upper electrode has at least an aperture. The direction of electric field crossing over the aperture forms an included angle with the alignment direction of an optically self-compensated birefringence liquid crystal layer. When an electric field is applied to the optically self-compensated birefringence liquid crystal layer, the liquid crystal molecules close to the aperture twist and rapidly transit from a splay state to a bend state. Thereafter, elastic force between the liquid crystal molecules spread the transition to the entire liquid crystal layer so that an optically self-compensated birefringence liquid crystal display is warmed up rapidly.